

# Endura® UDI5000-MTRX Universal Device Interface

## INTEGRATION PLATFORM FOR THIRD-PARTY SYSTEMS AND MATRIX KEYBOARDS



### Product Features

- User-Friendly Web-Based Administration
- Supports Three Operation Modes: ASCII, Matrix Digital Decoder, and Virtual Matrix
- Diagnostics Available Through Self-Contained Endura® Diagnostics and Simple Network Management Protocol (SNMP)



The **UDI5000-MTRX** provides users with a powerful means by which to leverage investments in legacy analog systems and integrations, while affording customers the benefits of today's IP and megapixel camera technologies. The **UDI5000-MTRX** supports three operating modes: ASCII mode, Matrix Digital Decoder mode (MDD), and Virtual Matrix mode (V9700). In ASCII mode, third-party systems interface with Endura® utilizing the Pelco ASCII protocol. MDD mode processes commands from Pelco's CM9700 matrix to access and pull live and recorded Endura video onto matrix monitors through a network decoder and a third-party video down converter. V9700 mode makes use of familiar CM9760 keyboards to control Endura devices and monitors, and takes full advantage of megapixel and HD camera technology advancements.

### ASCII Protocol Management

When operating in ASCII mode, the **UDI5000-MTRX** allows third-party systems that integrated with the analog matrix through the Pelco ASCII protocol to work with Endura. The **UDI5000-MTRX** in ASCII mode presents 1,024 virtual alarms that can be configured in Endura for scripted responses to alarms or to convert ASCII switching commands to Endura software commands, allowing ASCII-driven switching of cameras onto Endura monitors.

### V9700 Virtual Matrix Mode

In V9700 mode, the **UDI5000-MTRX** partially simulates a Pelco CM9780 analog matrix. A traditional PSM file is loaded onto the **UDI5000-MTRX**, which also processes Pelco P protocol commands from CM9760 keyboards and CM9760 alarm interface units connected through third-party serial to ethernet converters. While operating in V9700 mode, security administrators can continue leveraging most standard security operating procedures developed around analog matrix switches but in a virtual matrix environment. In addition, operators with previous experience using the CM9760-KBD keyboard can leverage their past experience and training when switching to a virtual matrix implementation. The V9700 mode supports Satellite Matrix Functionality (SMF) through the CM9700-NIU, thus allowing the Endura system to extend the useful life of existing analog matrix installations. When configured for V9700-SMF, CM9700 analog video can be converted and displayed on Endura digital monitors, and digital video from the Endura system can be converted and displayed on V9700 analog monitors. Matrix operators can have access to Endura

cameras on matrix monitors, and the ability to call up and switch matrix cameras and IP cameras onto Endura decoder monitors through the CM9760-KBD.

### Matrix Digital Decoder Mode

In MDD mode, the **UDI5000-MTRX** bridges Endura products to the CM9700 Series matrix system (using 9.03.012 software or later versions). Adding the **UDI5000-MTRX** with a NET5402R-HD to a matrix system allows security professionals to leverage the digital advantages of Endura with their tried and true CM9700 Series matrix system. This allows users to continue viewing live analog video through the matrix while viewing digital live or recorded video from the Endura system through the NET5402R-HD high definition digital decoder connected as an input on the matrix through a third-party video down converter.

### Convenient Scalability and Packaging

The **UDI5000-MTRX** supports Endura's unlimited scalability by providing a deterministic way to manage the processing load introduced with keyboard integration. Each **UDI5000-MTRX** can accommodate up to 10 connections, such as CM9760 Series keyboards and CM9760 alarm interface units. To provide unrestricted scalability, each **UDI5000-MTRX** is an independent server that can run multiple concurrent connections that are each running multiple routines. This capacity virtually eliminates undue load on other Endura servers and system components. **UDI5000-MTRX** servers can also act in a hot standby mode where the mission-critical nature of the installation demands redundancy.

The **UDI5000-MTRX** server is a half-width, 1 RU server. The compact size allows for two units to be rack mounted next to each other in just 1 RU of space using the optional rack mount kit. No additional software licensing is required.

### Network Administration and Upgradeability

The **UDI5000-MTRX** supports Simple Network Management Protocol (SNMP) monitoring and traps along with Endura diagnostic monitoring. As such, health status information is available through the Endura WS5200 advanced system management software or an external SNMP monitoring application. The **UDI5000-MTRX** complies with Endura's firmware upgrade scheme, allowing administrators to easily push out updated drivers and other utilities over the network as they become available from Pelco.



by Schneider Electric

International Standards  
Organization Registered Firm;  
ISO 9001 Quality System



C4680 / REVISED 3-14-13

# TECHNICAL SPECIFICATIONS

## MODEL

Use the following table to create a model number to specify your **UDI5000-MTRX**. For example, the model number for a unit that includes a European power cord is UDI5000-MTRX-EU.

Model	Country Code
UDI5000-MTRX	-US = North America -EU = Europe -UK = United Kingdom -CN = China -AU = Australia -AR = Argentina

## SUPPLIED ACCESSORIES

Power Cord 1 power cord (based on country designation)  
**Note:** Units shipped to China do not include power cords.

## OPTIONAL ACCESSORIES

RK-UDI5000 UDI5000 Series rack mount kit: 1 RU rack mount assembly, hardware, and power supply support bracket

## USER-SUPPLIED ACCESSORIES

In V9700 mode, third-party serial-to-Ethernet converters are required to connect the CM9760-KBD or CM9760-ALM products to the UDI5000-MTRX. In MDD mode, both serial-to-Ethernet and Video Down Converters are required. ASCII mode can use a serial-to-ethernet converter if needed.

## SYSTEM

Operating System Embedded Linux™

## NETWORK

Interface 1 Gigabit Ethernet RJ-45 (10/100/1000Base-T)

## FRONT PANEL

Power Button On/off  
Indicators  
Power Blue if power  
Network Activity Green, amber, red  
Unit Status Green, amber, red  
Auxiliary Interface 1 USB 2.0 port

## REAR PANEL

Serial Port RS-232 DB-9 connector  
Network Port 1 Gigabit Ethernet RJ-45  
Other Ports (not used) 2 USB 2.0 ports, 1 parallel port, 1 S-Video port, 1 VGA port, audio input/output

## POWER

Power Consumption 31.2 W, 107 BTU/H  
Power Input 12 VDC ±10%

## ENVIRONMENTAL

Operating Temperature 10° to 35°C (50° to 95°F) at unit air intake  
Storage Temperature -40° to 65°C (-40° to 149°F)  
Operating Humidity 20% to 80%, noncondensing  
Maximum Humidity Gradient 10% per hour  
Operating Altitude -15 to 3,048 m (-50 to 10,000 ft)  
Operating Vibration 0.25 G at 3 Hz to 200 Hz at a sweep rate of 9.5 octave/minute

**Note:** The temperature at the unit air intake can be significantly higher than room temperature. Temperature is affected by rack configuration, floor layout, air conditioning strategy, and other issues. To prevent performance failure and unit damage, make sure the temperature at the unit is continuously within the operating temperature range.

## PHYSICAL

Construction Steel cabinet  
Finish  
Front Panel Gray metallic with black end caps  
Chassis Black matte finish  
Mounting  
Desktop (feet) or rack 1 RU per unit, requires optional rack mount kit  
Unit Weight 3.0 kg (6.6 lb)  
Shipping Weight 3.6 kg (8.0 lb)

## RECOMMENDED PC REQUIREMENTS

Web Browser Microsoft® Internet Explorer® 7 or later  
Media Player Adobe® Flash® Player 3.0

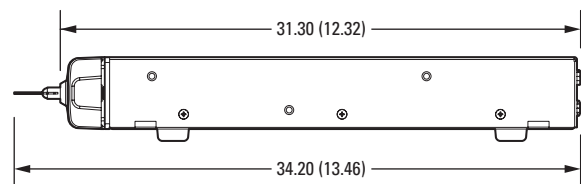
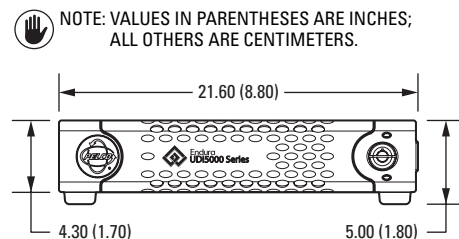
## SYSTEM COMPATIBILITY REQUIREMENTS

WS5200 v2.3 or later  
VCD5202 v2.3.2.0017 or later  
NET5402R v2.3.2.0017 or later  
CM9700 Series matrix and components (in MDD mode) v9.03.032 or later  
CM9760-KBD (in V9700 mode) v8.45 or later  
CM9760-ALM

## CERTIFICATIONS/RATINGS/PATENTS\*

- CE, Class A
- FCC, Class A
- UL/cUL Listed
- C-Tick
- CCC

\*At the time of this publication, this certification is pending. Please consult the factory, our Web site ([www.pelco.com](http://www.pelco.com)), or the most recent B.O.S.S.® update for the current status of certifications.



**NOTICE:** Judgment as to the suitability of the products for users' purposes is solely the users' responsibility. Users should refer to the Operation manuals for cautionary statements regarding user selected options and how they might affect video quality. Users shall determine the suitability of the products for their own intended application, picture rate and picture quality. In the event users intend to use the video for evidentiary purposes in a judicial proceeding or otherwise, users should consult with their attorney regarding any particular requirements for such use.

## Pelco by Schneider Electric

3500 Pelco Way, Clovis, California 93612-5699 United States

**USA & Canada** Tel (800) 289-9100 Fax (800) 289-9150

**International** Tel +1 (559) 292-1981 Fax +1 (559) 348-1120

[www.pelco.com](http://www.pelco.com) [www.pelco.com/community](http://www.pelco.com/community)

Pelco, the Pelco logo, and other trademarks associated with Pelco products referred to in this publication are trademarks of Pelco, Inc. or its affiliates. ONVIF and the ONVIF logo are trademarks of ONVIF Inc. All other product names and services are the property of their respective companies.

Product specifications and availability are subject to change without notice.

©Copyright 2013, Pelco, Inc. All rights reserved.